

01-03-00

A/PROV

EXPRESS MAIL NO. EL404931467US

PTO/SB/16 (2-98)

12/30/99

Please type a plus sign (+) inside this box →

**PROVISIONAL APPLICATION FOR PATENT COVER SHEET**

This is a request for filing a PROVISIONAL APPLICATION FOR PATENT under 37CFR 1.53(c)

INVENTOR(S)

Given Name (first and middle (if any))	Family Name or Surname	Residence (City and either State or Foreign Country)
Jeff	Tuatini	San Francisco, California

☐ Additional inventors are being named on the ___ separately numbered sheets attached hereto**TITLE OF THE INVENTION (280 characters max)****SHARED SERVICE FUNCTIONALITY INVOCATION****CORRESPONDENCE ADDRESS**

James A. D. White
 Perkins Coie LLP
 1201 Third Avenue, Suite 4800
 Seattle, WA 98101-3099
 (206) 583-8888 phone
 (206) 583-8500 fax

ENCLOSED APPLICATION PARTS (check all that apply)

<input checked="" type="checkbox"/> Specification	Number of Pages	<input type="text" value="15"/>	<input type="checkbox"/> Small Entity Statement
<input checked="" type="checkbox"/> Drawing(s)	Number of Sheets	<input type="text" value="8"/>	<input checked="" type="checkbox"/> Other (specify) <u>Check, Postcard</u>

METHOD OF PAYMENT OF FILING FEES FOR THIS PROVISIONAL APPLICATION FOR PATENT (check one)

<input checked="" type="checkbox"/> A check or money order is enclosed to cover the filing fees	FILING FEE AMOUNT (\$150.00)
<input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge additional filing fees or credit any overpayment to Deposit Account No. 50-0665	

The invention was made by an agency of the United States Government or under a contract with an agency of the United States Government.

☒ No☐ Yes, the name of the U.S. Government Agency and the Government contract number are: _____

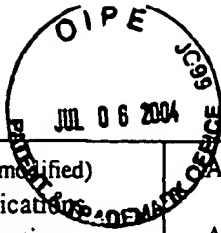
Respectfully submitted,

SIGNATURE

Maurice J. Pirio

DATE

December 30, 1999PRINTED NAME: Maurice J. PirioREGISTRATION NO. 33,273TELEPHONE (206) 583-8888DOCKET NO. 243768001US



Form PTO-1449 (modified) List of Patents and Publications For Applicant's Information Disclosure Statement (Use several sheets if necessary)	ATTY. DKT. NO. 5181-72200 APPLICANT: Slaughter et al. FILING DATE: October 19, 2000	SERIAL NO. 09/693,672 RECEIVED JUL 13 2004
---	---	---

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.) Technology Center 2100

B1	"Java™ Remote Method Invocation Specification," Sun Microsystems, Inc., <java.sun.com/products/dk1.2beta1>, 1997.
B2	Agha, et al., "Actorspaces: An Open Distributed Programming Paradigm," University of Illinois, Report No. UIUCDCS-R-92-1766, Open Systems Laboratory TR NO. 8, pp. 1-12, November 1992.
B3	Ahmed, et al., "A Program Building Tool for Parallel Applications," Yale University, pp. 1-23, December 1, 1993.
B4	Aldrich, et al., "Providing Easier Access to Remote Objects in Client-Server Systems," System Sciences, 1998, Proceedings of the 31 st Hawaii Internat'l. Conference, Jan. 6-9, 1998, pp. 366-375.
B5	Aldrich, et al., "Providing Easier Access to Remote Objects in Distributed Systems," Calif. Institute of Technology, www.cs.Caltech.edu/%7Ejedi/paper.html, Nov. 21, 1997.
B6	Anderson, et al., "Persistent Linda: Linda + Transaction + Query Processing," Proceedings of the 13 th Symposium on Fault Tolerant Systems, pp. 93-109, 1991.
B7	"Transparent Network Computing," Locus Computing Corporation, January 5, 1995.
B8	Alexander, et al., "Active Bridging," Proceedings of the ACM/SIGCOMM'97 Conference, Cannes, France, September, 1997.
B9	Beech, et al., "Object Databases as Generalizations of Relational Databases," Computer Standards & Interfaces, Vol. 13, Nos. 1/3 pp. 221-230, Amsterdam, NL, January 1991.
B10	Bertino, et al., "Object-Oriented Database Management Systems: Concepts and issues," Computer, Vol. 24, No. 4, pp. 33-47, Los Alamitos, CA, April 1991.
B11	Betz, et al., "Interoperable Objects: Laying the Foundation for Distributed Object Computing," Dr. Dobbs' Journal, Vol. 19, NO. 11, page 18(13), October 1994.
B12	Bevan, et al., "An Efficient Reference Counting Solution To The Distributed Garbage Collection Problem," Parallel Computing, NL, Elsevier Science Publishers, Amsterdam, Vol. 9, No. 2, pages 179-192, January 1989.
B13	Birrell, et al., "Distributed Garbage Collection for Network Objects," Digital Systems Research Center, NO. 116, pages 1-18, December 15, 1993.
B14	Birrell, et al., "Grapevine: An Exercise in Distributed Computing," Communications to the ACM, Vol. 25, No. 4, pp. 260-274, April 1982.
B15	Birrell, et al., "Network Objects," DEC SRC Research Report 115, February 28, 1995.
B16	Birrell, et al., "Implementing Remote Procedure Calls," ACM Transactions on Computer Systems, Vol. 2, No. 1, pp. 39-59, February 1994.
B17	Birrell, et al., "Network Objects," Operating Systems Review, 27(5), pp. 217-230, December 1993.
B18	Cannon, et al., "Adding Fault-Tolerant Transaction Processing to LINDA," Software-Practice and Experience, Vol. 24(5), pp. 449-466, May 1994.
B19	Cardelli, "Obliq, A Lightweight Language For Network Objects," Digital SRC, pp. 1-37, November 5, 1993.
B20	Carriero, et al., "Distributed Data Structures in Linda," Principles of Programming Language, pp. 1-16, 1986.

Note: References not received / do not exist in the application

EXAMINER: <u>mbt</u>	DATE CONSIDERED: <u>12/24/04</u>
----------------------	----------------------------------

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the patent owner.

Form PTO-1449 (modified) List of Patents and Publications For Applicant's Information Disclosure Statement (Use several sheets if necessary)	ATTY. DKT. NO. 5181-72200	SERIAL NO. 09/693,672
	APPLICANT: Slaughter et al.	GROUP: 2681
	FILING DATE: October 19, 2000	

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

B21	Carriero, et al., "Distributed Data Structures in Linda," Yale Research Report YALEU/DCS/RR-438, November 1985.
B22	Chung, et al., "A Tiny' Pascal Compiler: Part 1: The P-Code Interpreter," BYTE Publications, Inc., September 1978.
B23	Chung, et al., "A Tiny' Pascal Compiler: Part 2: The P-Compiler," BYTE Publications, Inc., October 1978.
B24	Dave, et al., "Proxies, Application Interface, And Distributed Systems," Proceedings International Workshop On Object Orientation In Operating Systems, pages 212-220, September 24, 1992.
B25	Deux, et al., "The O2 System," Communications Of The Association For Computing Machinery, Col. 34, No. 10, pages 34-48, October 1, 1991.
B26	Dijkstra, "Self-stabilizing Systems in Spite of Distributed Control," Communications of the ACM, Vol 17, No. 11, pp. 643-644, November 1974.
B27	Dolev, et al., "On the Minimal Synchronism Needed for Distributed Consensus," Journal of the ACM, Vol. 34, NO. 1, pp. 77-97, January 1987.
B28	Dollimore, et al., "The design of a System for Distributing Shared Objects," The Computer Journal, No. 6, Cambridge, GB, December 1991.
B29	Dourish, "A Divergence-Based Model of Synchrony and Distribution in Collaborative Systems," Xerox Technical Report EPC-1194-102, pp. 1-10, 1994.
B30	Drexler, et al., "Incentive Engineering for Computational Resource Management," The Ecology of Computation, Elsevier Science Publishers B.V., pp. 231-266, 1988.
B31	Gelernter, et al., "Parallel Programming in Linda," Yale University, pp. 1-21, January 1995.
B32	Droms, "RFC 1541 Dynamic Host Configuration Protocol," < http://www.cis.ohio-state.edu.htbin/rfc/rfc1541.html >, pages 1-33, October 1993.
B33	Emms, "A Definition Of AN Access Control Systems Language," Computer Standards And Interfaces, Vol. 6, No. 4, pp. 443-454, January 1, 1997.
B34	Fleisch, et al., "High Performance Distributed Objects Using Distributed Shared Memory & Remote Method Invocation," System Sciences, 1998, Proceedings of the 31 st Hawaii Internat'l. Conference, Jan. 6-9, 1998, pp: 574-578.
B35	Gelernter, "Generative Communication in Linda," ACM Transactions on Programming Languages and Systems, Vol. 7, No. 1, pp. 80-112, January 1985.
B36	Gottlob, et al., "Extending Object-Oriented Systems with Roles," ACM Transactions On Information Systems, Vol. 14, NO. 3, pp. 268-296, July 1996.
B37	Gray, et al. "Leases: An Efficient Fault-Tolerant Mechanism for Distributed File Cache Consistency," ACM, pp. 202-210, 1989.
B38	Guth, "JavaOne: Sun to Expand Java Distriubted Computing Effor," < http://www.sunworld.com/swol-02-1998/swol-02-sunspots.html >, XP-002109935, p.1, February 20, 1998.
B39	Guyenner, et al., "A New Consistency Protocol Implemented in the CaliF System," pp. 82-87, 1997.

RECEIVED

EXAMINER: *patato*

DATE CONSIDERED:

JUL 13 2004
Technology Center 2100

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered: Include copy of this form with next communication to the patent owner.

Form PTO-1449 (modified) U.S. Department of Patents and Publications For Applicant's Information Disclosure Statement (Indicate the number of sheets if necessary)		ATTY. DKT. NO. 5181-72200 APPLICANT: Slaughter et al. FILING DATE: October 19, 2000	SERIAL NO. 09/693,672 GROUP 1
OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)			
B40	Guyenet, et al., "Distributed Shared Memory Layer for Cooperative Work Applications," IEEE, 0742-1303/97, pp. 72-78, 1997.		
B41	Hamilton, et al., "Subcontract: A Flexible Base for Distributed Programming," Proceedings of 14 th Symposium of Operating System Principles, December 1993.		
B42	Hamilton, "Java and the Shift to Net-Centric Computing," Computer, pp. 31-39, August 1996.		
B43	Harris, et al., "Proposal for a General Java Proxy Class for Distributed Systems and Other Uses," Netscape Communications Corp., June 25, 1997.		
B44	Hartman, et al., "Liquid Software: A New Paradigm For Networked Systems," Technical Report 96-11, Dept. of Comp. Sci., Univ. of Arizona, June 1996.		
B45	Howard, et al., "Scale and Performance in a Distributed File System," ACM Transactions on Computer Systems, Vol. 6, No. 1, pp. 51-81, February 1988.		
B46	Pier, "A Retrospective on the Dorando, A High-Performance Personal Computer," Xerox Corporation, August 1983.		
B47	Pinakis, "Using Linda as the Basis of an Operating System Microkernel," University of Western Australia, Dept. of Computer Science, pp. 1-165, August 1993.		
B48	Riggs, et al., "Picking State in the Java TM System," USENIX, Association Conference on Object-Oriented Technologies and Systems, CP-002112719, pp. 241-250, June 17-21, 1996.		
B49	Rosenberry, et al., "Understanding DCE," Chapters 1-3, 6, 1992.		
B50	Sharrott, et al., "ObjectMap: Integrated High Performance Resources into a Distributed Object-oriented Environment," ICODP, 1995.		
B51	Stevenson, "Token-Based Consistency of Replicated Servers," IEEE, CH2686-4/89/0000/0179, pp. 179-183, 1989.		
B52	Thompson, "Regular Expression Search Algorithm," Communications of the ACM, Vol. II, No. 6, p. 149 et seq., June 1968.		
B53	Venners, "Jini Technology, Out of the Box," JAWORLD, 'Online!', pp. 1-4, December 1998.		
B54	Waldo, et al., "Events in An RPC Based Distributed System," Proceedings Of The 1995 USENIX Technical Conference, Proceedings USENIX Winter 1995 Technical Conference, New Orleans, LA, USA, 16-20, pages 131-142, January 1995.		
B55	Wilson, et al., "Design of the Opportunistic Garbage Collector," Proceedings of the Object Oriented Programming Systems Languages And Applications Conference, New Orleans, Vol. 24, No. 10, October 1989.		
B56	Wollrath, et al., "A Distributed Object Model for theJava TM System," USENIX Association, Conference on Object-Oriented Technologies and Systems, June 17-21, 1996.		
B57	Wu, "A Type System For An Object-Oriented Database Systems," Proceedings of the International Computer Software and Applications Conference (COMPSAC), Tokyo, Japan, pp. 333-338, Sept. 11-13, 1991.		
B58	Yemini, et al., "Towards Programmable Networks," IFIP/IEEE International Workshop on Distributed Systems: Operations and Management, L'Aquila, Italy, October 1996.		
B59	Yin, et al., "Using Leases to Support Server Driven Consistency in Large-Scale Systems," Computer Services Department, University of Texas at Austin, p. 285-294, May 26-28, 1998.		

EXAMINER:



DATE CONSIDERED:

12/24/04

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the patent owner.

Form PTO-1449 (modified) Office of Patents and Publications For Applicant's Information Disclosure Statement (Use several sheets if necessary)		ATTY. DKT. NO. 5181-72200 APPLICANT: Slaughter et al. FILING DATE: October 19, 2000	SERIAL NO. 09/693,672 GROUP 1 RECEIVED JUL 13 2004
OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.) Technology Center 2100			
B60	Yin, et al., "Volume Leases for Consistency in Large-Scale Systems," IEEE Transactions on Knowledge & Data Engineering, Vol. 11, No. 4, pp. 563-576, July/August 1999.		
B61	Mitchell, et al., "An Overview of the Spring System," February 1994.		
B62	Mitchell, et al., "Mesa Language Manual," Xerox Corporation, Palo Alto Research Center, 1978.		
B63	McDaniel, "An Analysis of a Mesa Instruction Set," Xerox Corporation, May 1982.		
B64	McGrath, "Discovery and its Discontents: Discovery Protocols for Ubiquitous Computing," Presented at Center for Excellence in Space Data and Information Science, NASA Goddard Space Flight Center, April 5, 2000.		
B65	Mummert, et al., "Long Term Distributed File Reference Tracing: Implementation and Experience," Carnegie Mellon University School of Computer Science, pp. 1-28, November 1994.		
B66	Orfali, et al., "The Essential Distributed Objects Survival Guide," Chapter 11: Corba Commercial ORBs, pages 203-215, John Wiley & Sons, Inc., 1996.		
B67	Ousterhout, et al., "The Sprite Network Operating System," Computer, IEEE, pp. 23-36, February 1988.		
B68	Pier, "A Retrospective on the Dorado, A High-Performance Personal Computer," IEEE Conference Proceedings, The 10 th Annual International Symposium on Computer Architecture, 1993.		
B69	Hunt, "IDF: A Graphical Data Flow Programming Language for Image Processing and Computer Vision," Proceedings of the International Conference on Systems, Man, and Cybernetics, pp. 351-360, Los Angeles, Nov. 4-7, 1990.		
B70	IBM TM Technical Disclosure Bulletin, "Object Location Algorithm," Vol. 36, No. 09B, pp. 257-258, September 1993.		
B71	IBM, "Chapter 6 - Distributed SOM (DSOM)," SOMobjects Developer Toolkit Users Guide, Version 2.1, pages 6-1-6-90, October 1994.		
B72	Anonymous, "Change-Notification Service for Shared Filed," IBM Technical Disclosure Bulletin, Vol. 36, No. 8, pages 77-82, XP002109435 New York, US, November 1993.		
B73	IBM TM Technical Disclosure Bulletin, "Retrieval of Qualified Variables Using Extendible Hashing," Vol. 36, No. 12, pp. 301-303, December 1993.		
B74	Anonymous, "Resource Preemption for Priority Scheduling," IBM TECHNICAL DISCLOSURE BULLETIN, Vol. 16, No. 6, page 1931, XP002109435 New York, US, November 1973.		
B75	IBM TM Technical Disclosure Bulletin, "Local Network Monitoring to Populate Access Agent Directory," Vol. 36, No. 09A, pp. 403-405, September 1993.		
B76	MUX-Elektronik, Java 1.1 Interactive Course, www.ils.se/~mux/javaic.html, 1995.		
B77	Jones, et al., "Garbage Collection: Algorithms for Automatic Dynamic Memory Management," pages 165-175, John Wiley & Sons, 1996.		
B78	Kambhatla, et al., "Recovery with Limited Replay: Fault-Tolerant Processes in Linda," Oregon Graduate Institute, Technical Report CSIE 90-019, pp. 1-16, September 1990.		
B79	Kay, et al., "An Overview of the Raleigh Object-Oriented Database System," ICL Technical Journal, Vol. 7, No. 4, pp. 780-798, Oxford, GB, November 1991.		

EXAMINER:



DATE CONSIDERED:

n/24/09

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the patent owner.

